Appl. No. : 10/664,699

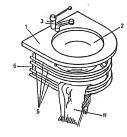
Filed: September 18, 2003

## REMARKS

Applicant respectfully requests reconsideration of the above-identified application in view of the amendments set forth above and the remarks set forth below.

Claims 1, 2, 4 and 6-25 Are Patentable Over EP 350453 in View of Leuschner and Martin or Chu

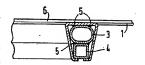
Claims 1, 2, 4 and 6-25 have been rejected as unpatentable over EP 350453 in view of Leuschner and Martin (US Patent No. 4,300,442) or Chu (US Patent No. 6,539,173).



The Examiner states that "Ep teaches a basin heater but does not teach the heater along the heating tube not coil around it nor does Ep teach use of a heating volume of less than 14 ounces." EP 0 350 453 B1 taught a washstand 1 that contained a washbasin 2 and that included a radiator surrounding the washbasin 2. The radiator comprised U-shaped heating pipes 5 that were connected to an inlet pipe 6 and an outlet pipe 7. The radiator could have an electric heating member inserted into one of the pipes 5 that define the radiator.

There was not a heating element positioned external to the pipes 5 and, if there were, such an element could pose a hazard in some applications due to the resultant proximity of such an external heating element to an occupant of the wash room. Thus, combination with an external heating element (such as that of Leuschner) would be improper as it would impair the primary function (or at least the safety) of the EP device.

Leuschner et al. disclosed an electric flow-thru heater for making coffee. The assembly of Leuschner et al. consisted of a water tube 3 that was fixed to a tubular heating body 4 along its length. To ensure consistent heat transfer relative to the prior art



constructions, the water tube 3 and the tubular heating body 4 were tightly clamped by lugs and were joined to each other by brazing 5. The heated tube of water 3 was used to heat the carrier plate 1, upon which a pot of coffee or the like could be supported.

The Examiner stated that the:

Appl. No. : 10/664,699

Filed: September 18, 2003

"patent to Leuschner et al. is applied for teaching that a flow thru heater can comprise a heating element 4 along the longitudinal extent of the fluid tube and use of the same leads to effective heating of the fluid. In view of this teaching it would have been obvious to modify the EP system to use a longitudinally extending heating element in lieu of the coiled scheme, to more effectively heat the fluid in the tube 3."

Applicant notes, however, that the EP patent did not teach any external or coiled heating element. Thus, Applicant does not understand what motivation the Examiner is relying upon for establishing a motivation to combine. Moreover, as expressed above, to configure the EP device with an external heating source would place an occupant of the washroom in close proximity to an unprotected heat source that could result in burns to the occupant. Thus, such a combination is improper. In the arguments below, Applicant will presume for the sake of argument that the combination is proper but Applicant wants to clearly state for the record that the combination upon which the rejections are based is improper.

With respect to Chu, Chu teaches a heating system in which an electrical resistance heater 20 was positioned within each of the water heating tubes 10. This is an example of the configurations upon which the present application was designed to improve. Moreover, upon a careful review of Chu, Applicant is unable to find any "teaching [of the] use of flow thru heaters to heat only a single cup at a time," as argued by the Examiner.

With respect to Martin, Martin also teaches a heating system in which a helically formed electric resistance cartridge-type heater 46 is engaged with a side wall 45 of a tank and a secondary disc-type resistance heater 47 is arranged adjacent a bottom wall 45' of the tank. Col. 5, lines 8-12. Again, the present construction is an improvement upon prior cartridge-type constructions. Moreover, upon a careful review of Martin, Applicant has identified the following comment:

The volume of water in the tank above the port 57 is equal to the volume of water intended to be dispensed by the machine between filling operations. The substantial volume of water in the tank below the port 57 is provided as a heat store, that is, a large volume of heated water below the port 57 is provided so that when cold water is added to the tank, a sufficient volume of heated water is in the tank to mix with and warm the added water to an acceptable and usable temperature, in the event that the heaters are ineffective to warm and/or heat the added water at a sufficiently fast rate.

Appl. No. : 10/664,699

Filed: September 18, 2003

Col. 6, lines 52-63 (emphasis added). Thus, contrary to the Examiner's assertion, Martin did NOT teach the "use of flow thru heaters to heat only a single cup at a time, whatever is loaded into the heated tube reservoir."

Claim 1 recites, among other limitations, a tube comprising a plurality of coils, a heater positioned exterior to said tube and comprising coils with each heater coil being adjacent to a pair of adjacent tube coils but not encircling an axis of the tube. Such a construction was not taught or suggested by any of the applied references and, even when combined, at least these limitations would not have resulted. For instance, none of the applied references taught or suggested a tube with a plurality of coils or a heater coil that is adjacent to a pair of adjacent tube coils but not encircling an axis of the tube. Thus, Claim 1 is patentable over the applied combination, regardless of whether the combination is proper.

Claims 2, 4 and 6-13 depend from Claim 1 and are patentable over the applied combination for at least the same reasons that Claim 1 is patentable over the applied combination. In addition, at least some of these claims recite further patentable distinctions.

Claim 14 recites an electric heater that is in contact over a length of the tube that defines a volume of less than that required to contain approximately 14 ounces of water such that a user on an aircraft can obtain a supply of heated water having a volume of less than approximately 14 ounces before the water heater begins heating a new supply of heated water. As stated above, such a construction was not taught or suggested by any of the applied references. As such, Claim 14 is not rendered obvious by the applied combination, even if the combination were proper.

Claims 15-18 depend from Claim 14 and are patentable over the applied combination for at least the same reasons that Claim 14 is patentable over the applied combination. In addition, at least some of these claims recite further patentable distinctions.

Claim 19 recites, among other limitations, a water tube comprising a spiral configuration to define a series of water tube coils and an electric heater comprising a spiral configuration to define a series of electric heater coils where the electric heater coils and the water tube coils have a common axis of curvature and each of the series of electric heater coils is in intimate relationship with only two adjacent coils of the water tube coils. Such a construction was not taught or suggested by any of the applied references. Thus, even if it were proper to combine the

Appl. No.

10/664,699

Filed

.

September 18, 2003

references, the combination could not teach or suggest at least these limitations and Claim 19 is patentable over the applied combination.

Claims 20-25 depend from Claim 19 and are patentable over the applied combination for at least the same reasons that Claim 19 is patentable over the applied combination. In addition, at least some of these claims recite further patentable distinctions.

Reconsideration and allowance of Claims 1, 2, 4 and 6-25 are respectfully requested.

## CONCLUSION

For the foregoing reasons, it is respectfully submitted that the rejections set forth in the outstanding Office Action are inapplicable to the present claims. Accordingly, issuance of a Notice of Allowance is most earnestly solicited. The undersigned has made a good faith effort to respond to all of the rejections in the case and to place the claims in condition for immediate allowance. Nevertheless, if any undeveloped issues remain or if any issues require clarification, the Examiner is respectfully requested to call Applicant's attorney in order to resolve such issue promptly. Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: \_//./3.2006

Robert J. Roby

Registration No. 44.304

Attorney of Record Customer No. 20,995

(949) 760-0404

3090868 110706